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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,994	07/09/2001	Masaharu Matsumoto	0074/010001	5174

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SMITH PATENT OFFICE  
1901 PENNSYLVANIA AVENUE N W  
SUITE 200  
WASHINGTON, DC 20006

EXAMINER

YOUNG, WAYNE R

ART UNIT	PAPER NUMBER
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2652

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DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/899,994

Applicant(s)

MATSUMOTO ET AL.

Examiner

W. R. Young

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. Claim 4 is objected to because on line 9, "of" should be deleted.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-7, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curley et al. in view of Dieterich.

Curley et al. in the audio signal processing for transmission art, discloses all the subject matter claimed, including decoder separating a data stream into first and second audio data having different sampling frequencies (see the abstract, figures 3-5, and column 1, lines 41-52, column 2, lines 22-28, column 3, lines 14-24, column 3, lines 50-64, column 4, lines 1-10, column 7, lines 5-26, column 7, line 39 - column 8, line 5) and filter for re-sampling the first audio data at the second audio data sampling rate and suppressing aliasing distortion (see figures 3-5 and

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column 7, line 66 - column 8, line 1, the elimination of “audio artifacts” would include “suppressing aliasing distortion” as claimed), and corresponding method, except for the claimed delay unit or corresponding delaying of second audio data by a period equal to a first audio data filter processing time. Curley et al. discloses pre-processing the “first audio data” to provide synchronous output of the first and second audio data, as opposed to the claimed delay of the “second audio data” by a period equal to a first audio data filter processing time as claimed to provide synchronous output of the first and second audio data. In reference to claims 5-7 and 16, note in Curley et al., column 3, lines 50-64.

Dieterich in the audio signal processing for transmission art, discloses providing a delay unit for delaying a second audio data by a period equal to a first audio data processing time, in order to provide synchronous output of the first and second audio data. See the front cover.

It would have been obvious to one of ordinary skill in the art at the time of the invention by applicant to provide a delay unit or corresponding delaying of second audio data by a period equal to the first audio data filter processing time of Curley et al. as suggested by Dieterich, the motivation being to provide synchronous output of the first and second audio data.

6. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curley et al. in view of Dieterich as applied to claims above, and further in view of Dattorro et al.

The primary references in the audio signal processing for transmission art, discloses all the subject matter claimed, except for the claimed use of a FIR filter for suppressing aliasing distortion in the first audio data.

Dattorro et al. in the audio signal processing for transmission art, discloses use of a FIR filter for suppressing aliasing distortion in audio data (see column 1), in order to provide more accurate audio output.

It would have been obvious to one of ordinary skill in the art at the time of the invention by applicant to provide use of a FIR filter for suppressing aliasing distortion in the audio data of the primary references as suggested by Dattorro et al., the motivation being to provide more accurate audio output.

7. Claims 8-11 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curley et al. in view of Dieterich as applied to claims above, and further in view of Duan et al.

The primary references in the audio signal processing for transmission art, discloses all the subject matter claimed, except for the claimed particular sampling frequencies of 48kHz or 44.1kHz and twice as high thereof for the first and second audio data.

Duan et al. in the audio signal processing for transmission art, discloses multiple audio data streams having many different sampling frequencies, including 48kHz and 44.1kHz, for the audio data (see the front cover). The particular sampling frequency used being a tradeoff between available bandwidth and quality of audio reproduction.

It would have been obvious to one of ordinary skill in the art at the time of the invention by applicant to provide any suitable combination of sampling frequencies, including 48kHz or 44.1kHz and twice as high thereof, for the first and second audio data of the primary references as suggested by Duan et al., the motivation being to provide improved audio reproduction quality in consideration of available bandwidth.

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In reference to claim 19, note that Curley et al. discloses that the audio data is from for example a CD-ROM, i.e., an optical disk as claimed (see column 1, 40-51).


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure of audio processing.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. R. Young whose telephone and VoiceMail number is (703) 308-1554. If a plurality of attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen, can be reached on (703) 305-9687.

The appropriate fax phone number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700 or the Group Customer Service section whose telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**WAYNE R. YOUNG**  
**PRIMARY EXAMINER**  
**ART UNIT 2652**

wry/wry  
6/9/04